# **Species**

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# First record of *Telchinia issoria* Hubner, 1819 (Lepidoptera: Nymphalidae) from Bihar

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# **ABSTRACT**

Authors reporting Yellow coster, *Telchinia issoria* Hubner, 1819 for the first time with established population from Hajipur and Motihari situated in Bihar.

Keywords: Yellow coster, First Record, Bihar.

## 1. INTRODUCTION

Yellow coster, *Telchinia issoria* Hubner, 1819 (Lepidoptera: Nymphalidae) belongs to family Nymphalidae in butterflies. In previous studies regarding butterflies' diversity of Bihar a total number of 174 butterfly species are well known. To explore the flora and fauna of Bihar authors regularly organise survey and as a result of consecutive survey, we find some caterpillars of *T. issoria* infesting on host plant *Puzolzia hirta* in litchi and mango orchards of Hajipur (Vaishali) and Motihari (East-Champaran). Literature studies regarding identification and distribution was done with the help of previous studies (Evans, 1932; Smetacek et al., 2023; Sheikh et al., 2023; Varshney and Smetacek, 2015). In previous studies, authors synonymed *T. issoria* as different two sub-species *T. issoria issoria* and *T. issoria anomala*. But in a recent study Smetacek et al., (2023) clearly clarified that there is no any reliable feature that can prove *T. issoria anomala* as a sub-species and treated as synonym of *T. issoria*.

## 2. MATERIALS AND METHODS

Five caterpillars of *T. issoria* were collected after observation and reared to confirm the species through adult. After adult emerged the taxonomic confirmation of species reconfirmed through photographs by Peter Smetacek. Caterpillars were reared in the box (40cm X 40cm) on the fresh leaves of host plant *Pouzolzia hirta*. Butterflies emerged in the lab were released in the same location, from caterpillars were collected by authors. In five, one butterfly emerged with curly wings and four emerged healthy (Figures 1 to 6).





Figure 1 & 2 Caterpillar of Telchinia issoria feeding on host plant Pouzolzia hirta.



Figure 3 Pupae of Telchinia issoria.



Figure 4 Dead caterpillar of Telchinia issoria.

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Figure 5 & 6 Adult male of Telchinia issoria.

#### 3. RESULTS & DISCUSSION

A large-scale survey on micro, macro and mega habitats is the time demand to explore the actual distribution of butterflies and their range expansion along with impact. Butterflies are the ecological indicator and due to the use of pesticides and cutting down larval host plants in lack of knowledge is also adversely affecting the diversity and density of some important butterfly species. In the era of urbanization, human-induced anthropogenic pressure is also a reason behind the alteration of habitat and bionomics of butterflies. This might be the reason behind some butterfly species possibly being transported unwillingly or establishing their population in the newly introduced flora and fauna due to dispersal and availability of host plants.

## Acknowledgement

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#### Conflicts of interests:

The authors declare that there are no conflicts of interests.

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# Ethical approval

The Animal ethical guidelines are followed in the study for species observation & identification.

## Data and materials availability

All data associated with this study are present in the paper.

## REFERENCES

- Evans WH. The Identification of Indian Butterflies—2nd Edition. Bombay Natural History Society, Bombay, 1932; x+454pp+32pl.
- Sheikh T, De R, Pandey R. Acraea issoria (Hübner, (1819)) -Yellow coster: A new addition to the butterfly fauna of Uttar Pradesh, India. Mun Ent Zool 2023; 18(2):1754-1756.
- 3. Smetacek P, Aung TT, Shilpa B. Synonymy of Telchinia issoria issoria and Telchinia issoria anomala (Lepidoptera: Nymphalidae: Acraeinae). Bionotes 2023; 25(1&2):78-81.
- 4. Varshney RK, Smetacek P. (eds.) A Synoptic Catalogue of the Butterflies of India. Butterfly Research Centre, Bhimtal and Indov. Publishers New Delhi, 2015; ii + 261 pp., 8 pl.

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